



>>Entry Name: Diethyl methylphosphonate

CAS Registry Number: 683-08-9

Related CAS Registry Numbers(s): 73778-54-8

MeP(O)(OEt)₂

Molecular Formula: C₅H₁₃O₃P

Molecular Weight: 152.13

Accurate Mass: 152.060232

Percentage Composition: C 39.48%; H 8.61%; O 31.55%; P 20.36%

Use/Importance: Useful synthetic intermediate. BuLi → anion which may be alkylated or acylated

Physical Description: Pleasant smelling liq.

Boiling Point: Bp 192-194°. Bp₁₁ 80°. Bp₁ 52-53°

Density: d₄⁰ 1.07

Refractive Index: n_D¹⁶ 1.4120 n_D¹⁴ 1.4062

Aldrich: 26811-9

Fluka: 64261

References:

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Hall, C.D. *et al.*, *J.C.S. Perkin 2*, 1977, 1232, (*pmr*)

Griffiths, W.R. *et al.*, *Phosphorus Sulfur Relat. Elem.*, 1978, **5**, 101, (*ms*)

Labintsev, V.B. *et al.*, *Zh. Org. Khim.*, 1978, **14**, 1371; *J. Org. Chem. USSR (Engl. Transl.)*, 1978, **14**, 1277, (*ms*)

Sass, S. *et al.*, *Org. Mass Spectrom.*, 1979, **14**, 257, (*ms*)

Pudovik, M.A. *et al.*, *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1983, 1859; *Bull. Acad. Sci. USSR, Div. Chem. Sci. (Engl. Transl.)*, 1653, (*synth, P-31 nmr*)

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Wils, E.R.J., *Fresenius' Z. Anal. Chem.*, 1990, **338**, 22, (*ms*)

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